



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/987,256	11/14/2001	Toshihisa Uchimoto	215898US2	6826

22850 7590 08/02/2004

OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.
1940 DUKE STREET
ALEXANDRIA, VA 22314

EXAMINER

PEREZ, ANGELICA

ART UNIT	PAPER NUMBER
----------	--------------

2684

DATE MAILED: 08/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/987,256

Applicant(s)

UCHIMOTO, TOSHIHISA

Examiner

Angelica M. Perez

Art Unit

2684

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE ____ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 November 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Seta (Seta, Mitsuru; US Patent No.: 6,483,825 B2) in view of Prior (Prior Art submitted by applicant).

Regarding claim 1, Seta teaches of a radio communication system comprising (column 1, lines 7-8): an absolute base station which adjusts the phase of a frame signal according to a GPS signal when a predetermined re-synchronization time is reached (column 3, lines 36-38; where "base station controller" corresponds to "absolute base station"), and transmits the frame signal (column 3, lines 39-42); and a subordinate base station which, upon reception of the frame signal from the absolute base station, adjusts the phase of an internal frame signal to coincide with the thus received phase of the frame signal (columns 2 and 3, lines 67 and 4 and column 3, lines 43-45 and), where the absolute base station adjusts an internal clock operating according to a line clock based on a time matching signal transmitted from a maintenance terminal (column 3, lines 59-64 and column 6, lines 18-24; where the base station controller adjusts its own time according to the GPS reference time).

Seta does not specifically teach of adjustment of the phase of the frame signal according to the GPS signal.

In related art, Prior teaches of adjustment of the phase of the frame signal according to the GPS signal (figure 5, items 3 and 5 and page 1, lines 12-23 e.g., "...an absolute base station which adjusts the phase of a framed signal based on the PPS signal received by the GPS receiver...).

It would have been obvious to a one of ordinary skill in the art at the time the invention was made to combine Seta's communication system with Prior's phase adjustment in order to later adjust a subordinate's internal phase signal with the received frame signal and achieve synchronization.

Regarding claim 2, Seta in view of Prior teaches of a radio communication system comprising (column 1, lines 7-8), transmits the frame signal (column 3, lines 39-42); and a subordinate base station which, upon reception of the frame signal from the absolute base station, adjusts the phase of an internal frame signal to coincide with the thus received phase of the frame signal (column 3, lines 43-45), where when it is detected that a call has been generated before the predetermined re-synchronization time is reached, the absolute base station hands over the call to said subordinate base station (column 3, lines 23-30; e.g., "a signal to be transmitted can be transmitted...from another base station...).

Prior teaches of adjustment of the phase of the frame signal according to the GPS signal (figure 5, items 3 and 5 and page 1, lines 12-23 e.g., "...an absolute base station which adjusts the phase of a framed signal based on the PPS signal received by the GPS receiver...).

Art Unit: 2684

Regarding claim 3, Seta teaches all the limitations of claim 2. Seta further teaches where when the handing-over of the call to the subordinate base station fails, the absolute base station forcibly cuts the call (column 3, lines 23-30; where it is inherent to cut communication when hand-over failure occurs).

Regarding claim 4, The radio communication system according to claim 2, where when the handing-over of the call to the subordinate base station fails (columns 65-67 and column 4, line 1), and adjusts the phase of the internal frame signal to coincide with the phase of the thus received frame signal (columns 3 and 4, lines 59-67 and 1-3, respectively; e.g., " achieving synchronization with transmitted signals from other base stations).

Seta does not specifically teach where the absolute base station receives a frame signal from another absolute base station existing in the same area.

In related art, Prior teaches where the absolute base station receives a frame signal from another absolute base station existing in the same area (page 2, lines 24-29; where communication among absolute stations is suggested).

Art Unit: 2684


Conclusion


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Angelica Perez whose telephone number is 703-305-8724. The examiner can normally be reached on 7:15 a.m. - 3:55 p.m., Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay Maung can be reached on 703-308-7745. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9314 for regular communications and for After Final communications.

Information regarding Patent Application Information Retrieval (PAIR) system can be found at 866-217-9197 (toll-free).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the TC 2600's customer service number is 703-306-0377.


TILAHUN GESESSE
PATENT EXAMINER


Angelica Perez
(Examiner)

July 23, 2004

Art Unit 2684